



City of New York
Department of Environmental Protection
Bureau of Engineering Design & Construction

MONTHLY PROGRESS REPORT

November 2016

(October 18 to November 16)

for

Administrative Settlement Agreement and Order
for Remedial Design, Removal Action and Cost Recovery
(Index No. CERCLA-02-2016-2003)

and

Administrative Order for Remedial Design
(Index No. CERCLA-02-2014-2019)

Dated: November 16, 2016

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1.0 NYC Gowanus Superfund Program Status Update

1.1 Red Hook CSO Facility

The City of New York (City) and the United States Environmental Protection Agency (EPA) entered into an Administrative Settlement Agreement and Order for Remedial Design, Removal Action and Cost Recovery (Index No. CERCLA-02-2016-2003) (Consent Order), which became effective June 9, 2016. The Consent Order provides that the City shall complete the Remedial Design (RD) for the Red Hook Combined Sewer Overflow (CSO) retention tank, which was selected as a component of the remedial action for the Gowanus Canal Superfund Site in EPA's September 27, 2013 Record of Decision (ROD). The RD of this CSO Tank, designated the "RH-034 Tank," was previously a requirement of an EPA Administrative Order issued May 28, 2014 (Index Number CERCLA-02-2014-2019) (RD UAO). A summary of the Consent Order's milestones and the status of each is set forth below, followed by a narrative description of work performed and anticipated and related issues.

Milestone Description	Deadline	Status
<i>Commence Environmental Impact Statement (EIS)</i>	<i>April 1, 2016</i>	<i>Completed</i>
<i>Issue Draft EIS/Certify ULURP</i>	<i>October 1, 2017</i>	<i>In Progress</i>
<i>Complete ULURP</i>	<i>May 1, 2018</i>	
<i>File Petition to Condemn</i>	<i>June 16, 2018</i>	
<i>Acquire Title</i>	<i>24 months after File Petition to Condemn or April 30, 2020, whichever is earlier</i>	
<i>Complete CP-1 Design Package</i>	<i>June 30, 2017</i>	<i>In Progress</i>
<i>Complete CP-02 Design Package</i>	<i>April 30, 2019</i>	<i>In Progress</i>
<i>Complete CP-03 Design Package</i>	<i>September 30, 2019</i>	<i>In Progress</i>
<i>Issue Notice to Proceed (NTP) to Contractor for CP-1</i>	<i>Not later than five months after acquisition of Parcels VI and VII, but in any event not later than May 1, 2020</i>	
<i>Mobilize for CP-1</i>	<i>Not later than 60 days after CP-1 NTP or 60 days after acquisition of Parcels VI and VII, whichever is later</i>	
<i>Complete CP-1 Construction</i>	<i>No later than 10 months after commencement</i>	
<i>Commence procurement to perform a response action at Parcels VI and VII within the footprint of the RH-034 Tank and any associated conduit areas</i>	<i>No later than the date on which National Grid commences response action on Parcels VI and VII outside the RH-034 Tank footprint</i>	
<i>Complete procurement for response action contractor</i>	<i>Within 12 months of commencement</i>	
<i>Perform a response action at Parcels VI and VII within the footprint of the RH-034 Tank and any associated conduit areas</i>	<i>Issue NTP within 30 days of completed National Grid response action; or within 30 days of completion of procurement, whichever is later</i>	
<i>Complete response action construction</i>	<i>Within 24 months of NTP</i>	

TABLE 1 - RED HOOK CSO FACILITY - MILESTONE STATUS SUMMARY

Work Performed Last Period

- DEP continued preparation of the Draft Pre-Design Investigation Work Plan that defines the scope and methodology for activities needed to characterize soil and/or groundwater and, as necessary, to fill data gaps and design the response action at Parcels II, VI and VII within the footprint of the RH-034 Tank.
- DEP continued preparation of preliminary City Environmental Quality Review (CEQR) documentation for the RH-034 Tank Designs.
- DEP continued to coordinate with other City Agencies for property acquisition.
- DEP continued to communicate and coordinate with the City Department of Parks and Recreation and with private property owners to advance CP-1 pre-design investigation activities.
- DEP continued its preparation of technical memoranda and conducted internal technical workshops to progress the facility planning and design.
- DEP and EPA held a Technical Workshop on November 16, 2016 to review recent submittals and unresolved technical issues.

Field Activity

- DEP conducted site surveys on streets and properties around the RH-034 outfall.
- DEP collected traffic and noise data in the vicinity of the RH-034 outfall.

Analytical Data

- DEP received preliminary analytical data from pre-demolition surveys at Parcels I and II.

Anticipated Progress Next Period

DEP will:

- Submit the Draft Pre-Design Investigation Work Plan to EPA.
- Continue preparation of preliminary CEQR documentation for the RH-034 Tank, and continue development of the Draft EIS.
- Continue to coordinate with other City Agencies on property acquisition.
- Continue to communicate and coordinate with property owners to advance CP-1 design pre-demolition survey activities.
- Continue field investigations for asbestos and other hazardous materials for CP-1 design.
- Mobilize for geotechnical investigation and perform soil borings at Parcels II, VI and VII.
- Continue preparation of technical memoranda and conduct internal technical workshops to progress the facility planning and design.
- Coordinate with National Grid on their schedule and plans to perform pre-design investigation work at Parcels VI and VII.

Issues Encountered and Efforts to Mitigate Delays

Below is a list of issues encountered during the design, including unresolved technical issues that could impede progress and potentially delay the schedule for the RH-034 Tank RD. If left unresolved, these issues could have a significant impact on the project schedule. A description of each issue, potential schedule impacts, efforts to mitigate delays and recommendations for resolution are provided below.

- **Selection of Location of CSO Tank Overflow Outfall**

EPA has indicated its preference for locating the new tank overflow outfall at or very close to the existing RH-034 outfall. In DEP responses to EPA comments dated April 11, 2016, DEP explained why the construction and operation of an effluent conduit routed through the existing RH-034 outfall is not technically feasible due to hydraulic conditions, maintenance of existing facility operations and space limitations at the overflow and Gowanus Pump Station. While DEP is considering a design consistent with the layout in the PRDR, DEP provided in its April responses a technical justification for locating the outfall at Degraw Street at the current RH-038 outfall.

Failure to timely finalize a suitable location for the new tank overflow outfall will prevent DEP from performing design tasks related to final tank layout and mechanical and structural design criteria. Failure to resolve this issue in a timely manner may also impact the design and construction of the cut-off wall, because the wall must be designed and constructed to accommodate the existing and future outfalls.

DEP has recommended to EPA that an overflow be located at or near the end of DeGraw Street to provide several operational benefits and greater protection for the Canal. DEP has described how the design can be coordinated with the design of the cut-off wall and the existing RH-038 outfall thereby eliminating the need to create a new penetration through the cutoff wall. DEP recommends moving forward with the design of an effluent overflow located at DeGraw Street to mitigate delays to the designs of the cut-off wall and RH-034 Tank. This issue will be discussed with EPA at the November 16th Technical Workshop.

Scope and Design for Response Action

EPA has questioned the need for any type of soil stabilization (ISS/ESS). DEP believes that some degree of stabilization will be required for excavation of the tank, whether in-situ or ex-situ.

Understanding the nature and extent of contamination at the site will allow DEP and EPA to evaluate treatment technologies and to design the response action for excavation within the footprint of the tank. Detailed design criteria cannot be established until that data is made available to DEP. The collection of this data is beyond DEP's control, as this activity is required to be undertaken by National Grid.

To further the data collection effort, DEC has directed National Grid to prepare a Preliminary Design Investigation (PDI) Work Plan for the RH-034 tank site (Parcels VI and VII). DEP has reviewed and commented on the PDI Work Plan. DEP recommends that the PDI activity proceed as soon as possible so that the data will be made available to DEP to enable it to establish design criteria and proceed with the environmental review, as well as additional PDI activities in a timely manner. Failure to acquire this information by early 2017 will result in delays to the environmental review and design schedule.

1.2 Owl's Head CSO Facility

The design of the Owl's Head CSO Facility, designated the "OH-007 Tank," is a requirement of the RD UAO. The UAO requires the City to complete the RD for the Owl's Head CSO retention tank, which was selected as a component of the remedial action set forth in the ROD. A narrative description of work performed and anticipated and related issues is set forth below.

Work Performed Last Period

- DEP continued preparation of technical memoranda and conducted internal technical workshops to progress the facility planning.
- DEP continued preparation of preliminary CEQR documentation.
- DSNY continued construction of a salt storage facility at the OH-4 site.

Field Activity

No field activity this period.

Analytical Data

No data analysis performed this period.

Anticipated Progress Next Period

DEP will:

- Continue to coordinate with DSNY for access to perform facility planning and design activities.
- Continue to draft work plans, technical memoranda, and conduct internal technical workshops as part of the facility planning process.
- Participate in a technical workshop with EPA to discuss unresolved technical issues.

Issues Encountered and Efforts to Mitigate Delays

Below is a list of issues encountered during the design, including unresolved technical issues that could impede progress and potentially delay the schedule for the OH-007 Tank RD. If left unresolved, these issues could have a significant impact on the project schedule. A description of the issue, potential schedule impacts, efforts to mitigate delays and recommendations for resolution are provided below.

- **Establishment of Setback from Canal and Selection of Tank Configuration**

DEP has developed concepts for alternative tank configurations to identify opportunities to reduce cost and schedule duration. DEP has received comments from EPA specific to the setback requirements and preferred tank configuration for the RH-034 tank. It is unclear whether EPA will establish constraints or preferences for setback requirements and layouts for the OH-007 tank.

The exact location, setback requirements, dimensions of the basin and other limitations must be determined prior to proceeding with the facility design. For example, the ability to coordinate the excavation support with bulkhead restoration could be further evaluated to obtain sufficient property for siting the tank and construction staging. DEP continues to analyze multiple scenarios, however, design concepts and other design criteria must be established for the project to continue in an efficient manner. Failure to resolve these issues expeditiously will result in

design schedule delays. This issue will be discussed with EPA at the November 16th Technical Workshop.

- **Access to Private Property for Pre-Demolition Surveys**

DEP is attempting to gain access to the private properties at OH-4. Unrestricted access will allow DEP to gather data to inform CP-1 design, develop an accurate cost estimate, schedule and bid package.

Failure to gain access will require DEP to make conservative assumptions about the layout, materials and characteristics of the buildings and operations on the properties in order to progress the CP-1 design.

DEP will utilize access to the adjacent City owned property to limit data gaps. DEP will continue to attempt to reach these owners to gain access.

1.3 Carroll Street High Level Storm Sewer Pilot and Monitoring Program

DEP will conduct a stormwater treatment pilot and monitoring program in connection with the Phase I Carroll Street High Level Storm Sewer Separation (HLSS) project at the Gowanus Canal. This program includes installation of two hydrodynamic separator units, evaluation of alternative treatment technologies, sampling and data collection, flow monitoring, data analysis, and reporting. It also includes similar sampling and data collection, flow monitoring, data analysis, and reporting for three vortex units installed at the Lightstone development, also known as 363-365 Bond Street.

Work Performed Last Period

- New York City Department of Design and Construction (DDC) and DEP continued design efforts for the pilot vortex separator units.
- DDC and DEP prepared preliminary design drawings and field verified utility clearances at the proposed vortex unit locations and it appears that locations 2 and 3 are not feasible due to interferences with existing and recently relocated utilities.
- DEP continued to coordinate with DDC to prepare calculations and produce final design documents.

Field Activity

- DDC's contractor continued construction work on the HLSS project, including the digging of test pits, utility relocations, and relocation of water mains.

Analytical Data

- No data analysis performed this period.

Anticipated Progress Next Period

DEP will:

- Finalize hydraulic calculations and establish final design specifications for the installation of two vortex units. DEP will continue to coordinate with DDC to modify the construction contract for the contractor to perform this work.

Issues Encountered and Efforts to Mitigate Delays

At this time, there are no significant technical issues that could impede progress and potentially delay the schedule for implementation of the stormwater treatment pilot and monitoring program.

1.4 First Street Turning Basin Restoration Design

The design of the restoration of the former First Street Turning Basin is a requirement of the RD UAO. This design was selected as a component of the remedial action set forth in the ROD. A narrative description of work performed and anticipated and related issues is set forth below.

Work Performed Last Period

- DDC and EPA held a Technical Workshop on October 6, 2016.
- DDC prepared draft minutes of the Technical Workshop.
- DDC has continued to evaluate EPA's schedule improvement suggestions.

Field Activity

- No field activity this period.

Analytical Data

- No data collected this period.

Anticipated Progress Next Period

- Submit the draft minutes from the Technical Workshop.

Issues Encountered and Efforts to Mitigate Delays

At this time, there are no outstanding technical issues that could impede progress and potentially delay the schedule for implementation of the former First Street Turning Basin Restoration design.

1.5 Pilot Sponge Park

DEP has installed a Pilot Sponge Park at the intersection of 2nd St. and the Canal. The pilot project is intended to divert and filter surface water runoff and create a publicly accessible open space. A narrative description of work performed and anticipated and related issues is set forth below.

Work Performed Last Period

- DEP has prepared and submitted a response to EPA's latest comments on the QAPP and a revised QAPP on September 16, 2016.

Field Activity

- No field activity this period.

Analytical Data

- No data collected this period.

Anticipated Progress Next Period

- DEP will await EPA's response on the latest QAPP submission in hopes of initiating the

performance monitoring.

Issues Encountered and Efforts to Mitigate Delays

DEP is awaiting EPA's response on the latest QAPP submission to implement the Pilot Sponge Park Water Quality Monitoring Program.

1.6 In-Canal Remedial Design

Participation as a work party in the In-Canal Remedial Design is a requirement of the RD UAO. This design was selected as a component of the remedial action set forth in the ROD. The City continues to participate as a Work Party in the In-Canal Remedial Design and to coordinate potential remedial design interfaces with City property such as bridges, bulkheads and the 1st Street Turning Basin. A separate detailed monthly report for this work is issued by National Grid on behalf of the work parties.